

REMARKS

In an Office Action dated November 14, 2007, the Examiner rejected claims 1, 3, 8-10, 12, 13, 19-21, and 23 under 35 U.S.C. §102(b) as being anticipated by Tiedemann, Jr. (U.S. patent no. 6,021,122, hereinafter referred to as “Tiedemann”). The Examiner rejected claims 4, 9, and 14-16 under 35 U.S.C. §103(a) as being unpatentable over Tiedemann in view of Sicher (U.S. patent no. 5,570,411), and rejected claims 5-7 and 17-18 under 35 U.S.C. §103(a) as being unpatentable over Tiedemann in view of Kumar et al. (U.S. patent no. 6,507,572). The rejections are traversed and reconsideration is hereby respectfully requested.

The Examiner rejected claims 1, 3, 8-10, 12, 13, 19-21, and 23 under 35 U.S.C. §102(b) as being anticipated by Tiedemann. Specifically, with respect to claim 1, the Examiner contended that Tiedemann teaches a method for queuing a mobile station (MS) in a wireless communication system comprising receiving a request from the MS to originate a call (col. 3, lines 52-53), determining whether the MS may be assigned a dedicated radio frequency (RF) resource in a service area of the MS (col. 12, lines 29-32), in response to determining not to assign a dedicated RF resource to the MS, adding the call to a call queue (col. 12, lines 34-35), subsequent to adding the call to the call queue, re-determining whether the MS may be assigned a dedicated RF resource in the service area based on signal strengths reported by the MS subsequent to the initial determination of whether the MS may be assigned a dedicated RF resource (col. 12, line 59 through col. 13, line 7), and in response to determining, subsequent to adding the call to the call queue, that the MS may be assigned a dedicated RF resource, conveying an assignment of a dedicated traffic channel to the MS without first requesting the MS to re-originate (col. 12, lines 39-40). The applicants respectfully disagree.

In the sections of Tiedemann cited by the Examiner, Tiedemann teaches an MS sending an origination message that invokes PACA. When a traffic channel is not available and the MS is authorized to use PACA, the MS's request is placed into a PACA queue. When a traffic channel becomes available and the MS is at the top of the PACA queue, the MS is assigned the traffic channel. Nowhere does Tiedemann teach a conveying of an assignment of a dedicated traffic channel to the MS without first

requesting the MS to re-originate and nowhere does Tiedemann teach that the assignment of a traffic channel in a service area occurs based on anything other than the initial reports and the initial determination to assign the MS a traffic channel.

That is, column 12, lines 39-41 of Tiedemann cited by the Examiner is a shorthand reference to PACA, not a deviation from PACA. The 3GPP2 A.S0001-A specification, which governs PACA, provides, in section 2.2.2.3.1, “Mobile Origination with PACA Service,” step h:

“h. When radio resources become available, the BS sends a PACA Message to instruct the MS to re-originate the call. ... The normal Origination procedure (see section 2.2.2.1) will process the re-origination request.”

In turn, section 2.2.2.1 provides:

“When a traffic channel becomes available, the BS will instruct the MS to re-originate the call by sending a PACA Message.”

Nothing in Tiedemann indicates any intention to deviate from PACA. In column 12, line 59 through column 13, line 7, of Tiedemann, cited by the Examiner, Tiedemann merely teaches replacing a conventional cell with a supercell with respect to performing idle handoffs. This is the concern of Tiedemann in the sections cited by the Examiner, not in re-writing PACA.

That is, when the MS moves from one cell to another, the MS performs an idle handoff by registering (e.g., by conveying an origination message) with the new cell. In order to reduce a frequency of these registrations, Tiedemann teaches a formation of a supercell comprising multiple cells, wherein the MS re-registers only when it roams beyond the supercell. These are idle handoff registrations. These registrations are not requests for a traffic channel assignment and are not intended to cause a deviation from the PACA specifications; these re-registrations are merely for the purpose of notifying of a cell change, that is, of a change in location of the MS. That is all Tiedemann teaches, when to perform an idle handoff. Idle handoffs were well known at the time of PACA and were already performed under the PACA concept. The mere teaching of performing

an idle handoff when moving beyond a supercell instead of a conventional cell in no way indicates any intention of deviating from PAC, it has nothing to do the procedure to be followed for assigning an MS a traffic channel when the MS is in a PACA queue, and nowhere here does Tiedemann indicate any intention to deviate from the PACA standards or to use idle handoff information (the idle handoff registrations) for the purpose of PACA channel assignment.

By contrast to Tiedemann, claim 1 teaches a re-determination of whether the MS may be assigned a dedicated RF resource in the service area based on signal strengths reported by the MS subsequent to the initial determination, and conveying an assignment of a dedicated traffic channel to the MS without first requesting the MS to re-originate. These features are not taught by Tiedemann and, therefore, the applicants respectfully request that claim 1 may now be passed to allowance.

Since claims 3-7 depend upon allowable claim 1, the applicants respectfully request that claims 3-7 may now be passed to allowance.

Claim 8 teaches a controller that, subsequent to adding the call to the call queue, re-determines whether the MS may be assigned a dedicated RF resource in the service area based on signal strengths reported by the MS subsequent to the initial determination of whether the MS may be assigned a dedicated RF resource, and in response to determining, subsequent to adding the call to the call queue, that the MS may be assigned a dedicated RF resource, conveys an assignment of a traffic channel to the MS without first requesting the MS to re-originate. As described in detail above, no such controller is taught by Tiedemann. Accordingly, the applicants respectfully request that claim 8 may now be passed to allowance.

Since claim 9 depends upon allowable claim 8, the applicants respectfully request that claim 9 may now be passed to allowance.

Claims 10 and 19 each teaches, subsequent to adding the call to the call queue, re-determining whether the MS may be assigned a dedicated RF resource in the service area based on signal strengths reported by the MS subsequent to the initial determination of whether the MS may be assigned a dedicated RF resource and in response to determining,

subsequent to adding the call to the call queue, that the MS may be assigned a dedicated RF resource, conveying an assignment of a traffic channel to the MS without first paging the MS. As described in detail above, these features are not taught by Tiedemann.

Furthermore, claims 10 and 19 each teaches a call where it is the *destination* MS in regard to which channel availability is determined and for whom a call is then queued until a channel becomes available. In rejecting this feature, the Examiner cited column 3, lines 52-53 and column 12, lines 29-35 of Tiedemann. In column 3, lines 52-53, Tiedemann is merely defining the term “idle state.” This has nothing to with column 12, lines 29-35, of Tiedemann, wherein Tiedemann teaches putting the *originating* MS into a PACA queue. In fact, Tiedemann only teaches a single MS, the originating MS. Therefore, the applicants respectfully contend that Tiedemann does not teach the features of claims 10 and 19 and respectfully request that claims 10 and 19 may now be passed to allowance.

Since claims 12-18 depend upon allowable claim 10 and claim 20 depends upon allowable claim 19, the applicants respectfully request that claims 12-18 and 20 may now be passed to allowance.

Claims 21 and 23 each teaches, in response to determining not to assign a dedicated RF resource to an MS in a first service area, adding a call associated with the MS to a call queue, determining whether the MS has moved to a second service area, in response to determining that the MS has moved to the second service area, determining whether the MS may be assigned a dedicated RF resource in the second service area, and in response to determining that the MS may be assigned a dedicated RF resource in the second service area, assigning a dedicated RF resource to the MS in the second service area without first paging the MS and requesting the MS to re-originate. By contrast and as described in detail above, Tiedemann merely teaches PACA, that is, when an MS with a call queued is detected to have moved to a new coverage area, the MS must re-originate a call. The only additional teaching of Tiedemann is when to perform an idle handoff, that is, when to notify the infrastructure that the MS has moved. But idle handoffs were known at the time of PACA and Tiedemann nowhere indicates any intent to deviate from PACA, that is, to assign a traffic channel to the MS in the second service area without

first paging the MS and requesting the MS to re-originate the call. By contrast, claims 21 and 23 teach that an MS not be required to re-originate a call even when a change of service areas is reported/detected. Therefore, the applicants respectfully contend that Tiedemann does not teach the features of claims 21 and 23 and respectfully request that claims 21 and 23 may now be passed to allowance.

As the applicants have overcome all substantive rejections and objections given by the Examiner and have complied with all requests properly presented by the Examiner, the applicants contend that this Amendment, with the above discussion, overcomes the Examiner's objections to and rejections of the pending claims. Therefore, the applicants respectfully solicit allowance of the application. If the Examiner is of the opinion that any issues regarding the status of the claims remain after this response, the Examiner is invited to contact the undersigned representative to expedite resolution of the matter. Furthermore, please charge any additional fees (including any extension of time fees), if any are due, or credit overpayment to Deposit Account No. 50-2117.

Respectfully submitted,
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